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(54) Title: CHIP PRODUCTION, HYBRIDIZATION AND DATA INTERPRETATION FOR ANTIBODY AND PROTEIN MICROARRAYS

(57) Abstract: An antibody microarray screen including a substrate, monoclonal and polyclonal antibodies that are purified immunoglobins, wherein the antibodies are spotted on predetermined positions on the substrate, and fluids unprocessed for immunoglobulin isolation (e.g., anti-sera, ascites fluids, or hybridoma culture media), wherein the unprocessed fluids are spotted on the predetermined positions on the substrate. Production of drug-metabolizing enzyme antibody microarrays containing closely related cytochromes P450 is disclosed. Methods of manufacturing an antibody microarray, an internal control molecule for use in an antibody microarray, a method of determining optimal spotting concentrations of IgG and a method to increase a detectable signal with microarray analysis are disclosed.